



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,262	09/25/2003	James M. Walker	DQIP-144	6605

7590 07/08/2004

ALAN C. BRYSON
BROWNING BUSHMAN, P.C.
SUITE 1800
5718 WESTHEIMER
HOUSTON, TX 77057

EXAMINER

PICKARD, ALISON K

ART UNIT	PAPER NUMBER
----------	--------------

3676

DATE MAILED: 07/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,262

Applicant(s)

WALKER ET AL.

Examiner

Alison K. Pickard

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/6 4/26.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 11, 17, 18, and 27-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Stephenson (4,635,967).

Stephenson discloses a method of sealing and a composite metal sealing ring between first and second tubular members each having bores and conical inner sealing surfaces that are urged together to engage the sealing ring. The sealing ring comprises a metal body 32, a first conical outer sealing surface 42, a second conical outer sealing surface 42, and first and second corrosion-resistant inlays (col. 3, lines 50-57) made of a corrosion resistant alloy.

3. Claims 1, 2, 10, 11, 17, 18, and 26-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Sweeney (6,722,426).

The applied reference might have a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

Art Unit: 3676

inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Sweeney discloses a method of sealing and a composite metal sealing ring between first and second tubular members each having bores and conical inner sealing surfaces that are urged together to engage the sealing ring. The sealing ring comprises a metal body 43, a first conical outer sealing surface 45, a second conical outer sealing surface 45, and first and second corrosion-resistant inlays 55 made of a corrosion resistant alloy. The first and second sealing surfaces also include backup sealing surfaces 47.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 9, 19, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephenson in view of Applicants' Admitted Prior Art (APA) (spec. pages 1-2).

Although Stephenson discloses the body can be made from an alloy, Stephenson does not specifically state carbon steel or low alloy steel having the claimed expansion coefficient. Applicants admit that it is known to form a sealing body from carbon steel or low alloy steel having the claimed coefficient of expansion to provide a fluid tight seal under high pressure applications. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make the body from carbon steel or low alloy steel as taught by Applicants to ensure a fluid tight seal under high pressure applications.

Art Unit: 3676

6. Claims 4-6 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephenson.

Stephenson does not disclose the inlay thickness required by the claims. Using such dimensions is considered a design choice. It is not considered inventive to discover the workable or optimum ranges by routine experimentation. See *In re Aller*, 105 USPQ 233, 235 (CCPA 1955). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make the inlay thickness in the ranges required by the claims as a matter of choice in design.

7. Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephenson in view of Applicants' APA.

Although Stephenson discloses the body can be made from an alloy, Stephenson does not specifically state carbon steel or low alloy steel having the claimed expansion coefficient. Applicants admit that it is known to form a sealing body from carbon steel or low alloy steel having the claimed coefficient of expansion to provide a fluid tight seal under high pressure applications. Stephenson does not disclose the inlay thickness required by the claims. Using such dimensions is considered a design choice. It is not considered inventive to discover the workable or optimum ranges by routine experimentation. See *In re Aller*, 105 USPQ 233, 235 (CCPA 1955). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make the body from carbon steel or low alloy steel as taught by Applicants to ensure a fluid tight seal under high pressure applications and to make the inlay thickness in the ranges required by the claims as a matter of choice in design.

Art Unit: 3676

8. Claims 7, 8, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephenson in view of Tillman (3,507,506).

Stephenson does not disclose a coating over the inlays. Tillman teaches a sealing ring having conical sealing surfaces with inlays 31 and 32. Tillman teaches coating the surfaces and inlays with a corrosion-resistant material such as silver or a fluoropolymer to provide a tighter joint (see col. 2, lines 63-67). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make coat the inlays with the coating as taught by Tillman to provide a tighter joint and a better seal.

9. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephenson in view of Applicants' APA as applied to claim 12 above, and further in view of Tillman.

Stephenson does not disclose a coating over the inlays. Tillman teaches a sealing ring having conical sealing surfaces with inlays 31 and 32. Tillman teaches coating the surfaces and inlays with a corrosion-resistant material such as silver or a fluoropolymer to provide a tighter joint (see col. 2, lines 63-67). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make coat the inlays with the coating as taught by Tillman to provide a tighter joint and a better seal.

10. Claims 12, 15, and 16 are rejected under 35 U.S.C. 103(a) as being obvious over Sweeney in view of Applicants' APA.

The applied reference might have a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under

Art Unit: 3676

37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Sweeney does not specifically state the body comprises carbon steel or low alloy steel having the claimed expansion coefficient. Applicants admit that it is known to form a sealing body from carbon steel or low alloy steel having the claimed coefficient of expansion to provide a fluid tight seal under high pressure applications. Sweeney does not disclose the inlay thickness required by the claims. Using such dimensions is considered a design choice. It is not considered inventive to discover the workable or optimum ranges by routine experimentation. See *In re Aller*, 105 USPQ 233, 235 (CCPA 1955). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make the body from carbon steel or low alloy steel as taught by Applicants to ensure a fluid tight seal under high pressure

Art Unit: 3676

applications and to make the inlay thickness in the ranges required by the claims as a matter of choice in design.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 703-305-0882.

The examiner can normally be reached on M-F (10-7:30), with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alison K. Pickard
Primary Examiner
Art Unit 3676

AP